Rediscovery of two endemic taxa from Southern India with notes on their distribution

V.S. Ramachandran

Department of Botany, Kongunadu Arts and Science College Coimbatore - 641 003, Tamil Nadu, India

Abstract

Claoxylon wightii Hook. f. var. wightii (Euphorbiaceae) and Clematis bourdillonii Dunn (Ranunculaceae), endemic to southern India, were re-collected after the type collection. Notes on their distribution are provided.

INTRODUCTION

The Medicinal Plants Conservation Area (MPCA) programme, provided opportunities for intensive botanical explorations along the Western Ghats of Tamil Nadu during 1994-95. Special attention was paid to collect rare and endemic plants, which resulted in the rediscovery of two interesting rare taxa viz., Claoxylon wightii Hook. f. var. wightii (Euphorbiaceae) and Clematis bourdillonii Dunn (Ranunculaceae), bringing to light some interesting aspects on the distribution of the taxa.

J.D. Hooker (1887) described Claoxylon wightii as a new species based on Wight's and Beddome's collections from Courtallam and Tinnevelly hills respectively. Gamble (1925) in his Flora of the Presidency of Madras placed it in Micrococca as M. wightii and enumerated var. hirsutum (Hook.f.) Prain as well. While revising Claoxylon in India, Susila Rani and Balakrishnan (1995) confirmed their earlier recognition of the 4 varieties viz., var. wightii, var. angustatum, var. hirsutum and var. glabratum under C. wightii. Susila Rani and Balakrishnan (1995) stated that C. wightii Hook. f. var. wightii is a rare variety and that it was never collected since the type in 1835.

The present author during one of his explorations collected this species in Mathikettan Shola near Berijam in Kodaikanal Hills, Dindukal district, Tamil Nadu in 1994. Earlier it was collected from the Eastern slopes of the W. Ghats with restricted distribution. Thus the present collection from Dindukal district was a rediscovery approximately after 160 years and shows that the species has an extended distribution.

Only a small population of less than twenty individuals was observed, indicating its rarity. A brief description is provided based on the present collection.

V.S. Ramachandran

Claoxylon wightii Hook. f., Fl. Brit. India 5: 413. 1887; Susila Rani & Balakrishnan, J. Econ. Tax. Bot. 16: 733. 1992, Rheedea 5: 133. 1995. *Micrococca wightii* (Hook.f.) Prain, Ann. Bot., London 25: 630. 1911; Gamble, Fl. Pres. Madras 1328. 1925; Chandrabose in Henry *et al.*, Fl. Tamil Nadu 2: 234. 1987. var. wightii.

Small tree, up to 5 m high; branchlets terete, nearly glabrous, nodes distant; internodes 1-4 cm long. Leaves alternate, ovate-lanceolate to elliptic-lanceolate, broadly cuneate at base, acute to acuminate at apex, subentire, crenate or serrate along margins, 2.5-17 x 1.5-4 cm; leaves, petioles and inflorescences nearly glabrous or sparsely white-hairy; petioles ca 4.5 cm long. Racemes many up to 6 cm long; male clusters fairly close or distant, stalked; each flower mixed with 1-3 sterile flowers in a cluster.

Fl.: Feb. - Mar.

Ecology: In shola forests.

Distribution: India. Endemic to the southern W. Ghats in Tamil Nadu.

Specimens examined: Tamil Nadu, Dindukal district, Kodaikanal Hills, Mathikettan Shola, ca. 2000 m, near Berijam, 23.2.1996, V.S. Ramachandran 10368 (MH).

Dunn (1914) described Clematis bourdillonii as a new species in Gamble's Flora of the Presidency of Madras based on Bourdillon's material collected in 1897 from Merchiston Estate, Travancore. None seems to have recollected it since then. Based on this Vajravelu and Daniel (1983), considered it as a threatened species. It is worthwhile to mention at this point the observations made by Rau (1983), "Dunn (Bull. Misc. Inform. 81. 1914) described a Clematis from Kerala under the name, C. bourdillonii. It is stated to have been collected at Merchiston Estate and so far this is the only collection known. It would be interesting to know if the workers in the region have come across this species and has been described as a 'handsome creeper'.

Mohanan and Henry (1994) stated that, "this rare species could not be collected and is not represented in MH". They also lectotypified the name based on Bourdillon's collection housed at the University College Herbarium, Thiruvananthapuram.

The present author during one of his explorations collected this species at Mathikettan Shola, near Berijam on the Kodaikanal hills, Dindukal district, Tamil Nadu in 1994. The type of *C. bourdillonii* was collected on the western slopes of the W. Ghats in Travancore and hence thought to be a narrow endemic. However, the present collection on the eastern slopes of the W. Ghats in Dindukal district in Tamil Nadu which is actually about 200 km eastwards from the type locality may indicate its presence in a wider area of distribution in the southern W. Ghats.

Rediscovery of two endemic species

A small population of less than ten individuals were observed, indicating its rarity. Hence a brief description is provided with an illustration.

Clematis bourdillonii Dunn, Bull. Misc. Inform. 8. 1914, in Gamble, Fl. Pres. Madras 3. 1915; Rau, Bull. Bot. Surv. India 23: 213. 1983; Vajravelu & Daniel in Jain & Sastry, Mat. Cat. Threat. Pl. India 8. 1983; Rau in Sharma & Balakr., Fl. India 1: 59. 1993; Mohanan & Henry, Fl. Thiruvananthapuram 40. 1994.

Shrubs, climbing or straggling; branches glabrous or sparsely hairy. Leaves 1-2 ternate; leaflets oblong or elliptic, acute or obtuse, entire or sometimes coarsely toothed, 4-16 x 1.5-7.5 cm, nerves 3-5-ribbed and raised beneath. Inflorescences axillary or terminal, manyflowered panicles. Flowers ca 2 cm across, with up to 1.7 cm long pedicels. Sepals 4, reflexed, glabrous inside, villous outside. Filaments glabrous; connectives produced beyond anther lobes. Achenes with up to 5 cm long tails.

Frts.: Dec. - Jan.

Ecology: In shola forests.

Distribution: India: Endemic to the Southern W. Ghats in Kerala and Tamil Nadu.

Specimens examined: Tamil Nadu: Dindukal district, Kodaikanal Hills, Mathikettan Shola, ca. 2100 m, near Berijam, 9.12.1994, V.S. Ramachandran 10283 (MH).

Acknowledgements

Thanks are due to the Director, FRLHT, Bangalore for providing financial assistance to carry out this research work under Medicinal Plants Conservation Area Project (MPCA), Mr. G.S. Goraya, Senior Programme Officer, for necessary help in the field; Dr. M. Aruchami, Secretary and Dr. K. Kumaraswami, Principal, Kongunadu Arts and Science College, Coimbatore for necessary permission and facilities; Dr. N.P. Balakrishnan, Emeritus Scientist, BSI, Coimbatore for confirming the identity and Dr. P. Daniel, Deputy Director, BSI, Coimbatore for critically going through the manuscript and offering valuable suggestions.

Literature cited

Gamble, J. S. 1915. Flora of the Presidency of Madras. Adlard & Son Ltd., London. Vols. I & II.

Hooker, J. D. 1887. The Flora of British India. L. Reeve & Co., London, Vol. 5.

Mohanan, M. & A. N. Henry. 1994. Flora of Thiruvananthapuram, Kerala. Botanical Survey of India, Calcutta.

Rau, M. A. 1983. A review of Indian Ranunculaceae. Bull. Bot. Surv. India 23: 213-216. 1983.

V.S. Ramachandran

- Rau, M. A. 1993. Ranunculaceae. *In*: B.Sharma & N. P. Balakrishnan (Eds.), *Flora of India*. Botanical Survey of India, Calcutta, Vol. I.
- Susila Rani, S. R. M. & N. P. Balakrishnan. 1995. A revision of the genus Claoxylon Andr. Juss. in India. Rheedea 5: 113-141.